

# A transmission power control method and a communication system using the same

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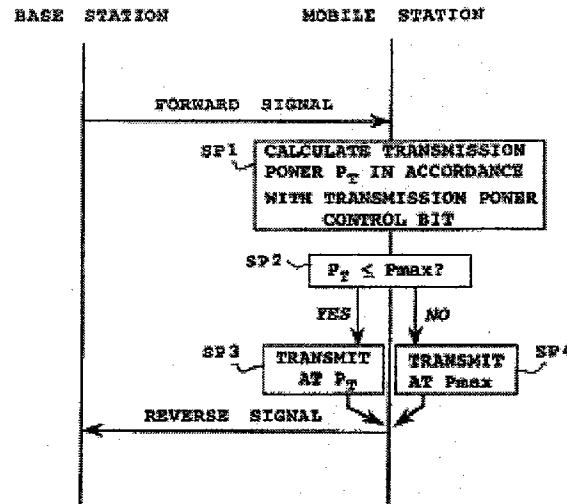
EP0682418 (A2)  
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A transmission power control method for a CDMA system including the steps of calculating an actual SIR (Signal-to-Interference Ratio) of a desired signal; deciding whether the actual SIR is greater than a predetermined reference SIR which satisfies a predetermined communication quality; forming a transmission power control bit on the basis of a result of deciding; inserting the transmission power control bit periodically into a forward frame, which steps are performed at the base station, and steps of calculating tentative reverse transmission power in accordance with the transmission power control bit in the forward frame; deciding reverse transmission power such that the reverse transmission power is made equal to the tentative reverse transmission power when the tentative reverse transmission power is less than a predetermined maximum transmission power, but otherwise made equal to the predetermined maximum transmission power; and transmitting a signal from the mobile station to the base station at the reverse transmission power, which steps are performed at the mobile station. This makes it possible to prevent the transmission power from diverging to the maximum output of a transmitter power amplifier.



**FIG.10**